1:Beals E-5 (1940-1941)1946 NU34 Tarasco NU34
[p.346]


939 Both men had arrived with the highway construction crews; neither was making what he regarded as a satisfactory living and both hoped to leave.

Tile and brick are made in an old chapel and surrounding grounds, formerly part of the *curato* or curacy. Ten percent of the finished [427] tile or brick is given to the *municipio* as rent [632] for the buildings and for the right to dig clay on public lands.

A grayish clay is brought to the factory in sacks by mules. It is mixed with water and manure in a board-lined pit in the patio, where it is turned with spades and hoes and trodden with bare feet. The mixed clay is pressed into a trapezoidal wooden form laid flat on a table (fig. 5). The top is smoothed carefully with the wet hand. The clay is then slipped off the table onto a wooden form resembling half of a truncated cone, but with a handle. After a few moments, the clay, now in the shape of a tile, is slipped off on the floor. When fairly well dried, the tile is moved outdoors for further drying.

Bricks are made in the same fashion but with a different wooden form. Both brick and tile are fired in a wood-fired kiln in the patio. The wood is cut and hauled by the brickmakers and tilemakers. The time required to make a thousand brick or tile is about 9 days, as follows:

| | Days |
|---|---|
| Getting and mixing clay | 2 |
| Cutting and hauling wood | 1 |
| Shaping 1,000 brick or tile | 5 |
| Loading kiln | 1 |
| Total | 9 |

## TEXTILES

285 *Mats.*—Most sleeping mats used in Cherán are imported, but at least three women make [438] them locally. The mats are made of tules imported on burros from Erongaricuaro on Lake Pátzcuaro. The mats are made in twilled technique, usually treating two tules as a single weaving element. The only tool observed was [412] a stone fist hatchet for severing tules.

294 *Hat making.*—About four men manufacture 439 men's hats of palm straw braid, although production does not meet the local demand. The activity involves complex trading arrangements, for palms do not grow in Tarascan terri-

1:Beals E-5 (1940-1941)1946 NU34 Tarasco NU34
[p.35a] Sierra Tarascans

294 tory. Palm leaf originates in Ario de Rosales,
[439] whence it is transported to the market at
Paracho. Weaving of the straw into braid is
[438] done by women of the several small villages in
the *municipio* of Paracho. The finished braid
is sold in the Paracho market, the bulk of it
going to the village of Jaracuaro on an island in
Lake Pátzcuaro. The thread used for sewing
the braid is an imported machine-made thread.

The tools of a hat maker include:

[413]
- Sewing machine
- 3 or 4 hat blocks
- Wooden paddle for blocking
- Smooth stone for blocking
- Wooden reel for thread (which is bought in skeins)
- Iron punch for ventilators
- Roller like a clothes-wringer for straightening and smoothing braid

The type of hat most commonly made has a low crown and broad brim. Each hat requires about three bundles of braid. The braid is sewn together in a spiral beginning at the middle of the crown. Each spiral of the braid overlaps its predecessor about three-quarters or five-sixths of its width. One man, working steadily, can make about three hats a day, but no one in Cherán works steadily every day.
[463] Essentially, hat making is a part-time occupation. Some hat makers are also farmers, while one is also a "tailor." Another also operates a *nixtamal* mill. One hat maker employs an assistant who is said to be paid 50 centavos a hat. This is doubtful in view of hat prices and the cost of materials.

294 Sometimes hats are whitened. They are
386 first treated with glue, then successively coated with *oxido* (a crystalline material melted down), a white pigment (*blanco de sin*), and then a white varnish (*blanco de España*). None of these materials was further identified. The price obtained for hats varies with the thinness of the braid, fineness of the sewing, and the finish applied.

*Embroidery, crochet, and drawn work.*—A
286 number of women ornament women's blouses
531 or make crocheted petticoat borders as a part-
[462] time occupation. Women's blouses are sometimes equipped with crocheted yolks. Crocheted bands are also placed on the short blouse sleeves. Bands of embroidery for the bottoms

1:Beals E-5 (1940-1941)1946 NU34 Tarasco NU34
Sierra Tarascans

[p.366]

286 Weaving is done on a wooden European type
294 loom with heddles and treddle. A blanket is always woven in two strips, and then sewed together with an opening left in the center so it may be worn as a poncho. Further details are omitted pending a study of the handicraft in a town specializing in weaving.

286 *Lace weaving.*—It is probable that this technique is misnamed. In any case it is not properly a Cherán technique, the only weaver being a woman from Aranza. So far as is known, only six or eight women in the latter village know the technique.

A broadloom frame is used, about 8 feet by 4 feet. It is warped with white cotton thread. The weft, also of cotton thread, is placed with the fingers. Designs are set off by open work and consist of human and animal figures.
[435] A bedspread or tablecloth takes 2 months or more to make and sells at $75.00 and up (asking price). Often the design is

1:Beals E-5 (1940-1941)1946 NU34 Tarasco NU34


286 tensive labor, although the weavers usually do some housework also.

## CLOTHING AND DRESS HABITS

294 463 *Clothing manufacture.*—Many persons make their own clothes, but a number of persons make clothes for sale or on order. Even men may make clothes for sale if the family owns a sewing machine. For example, one storekeeper makes men's cotton trousers (*calzones*) and men's shirts in his spare time, selling them in the store. His wife also sews but less frequently. Many storekeepers have one or more sewing machines—the largest number observed was three—which are rented to women who come to the store to sew. One ambitious family (whose sons were sent to Morelia to school) made much of the family income from the labor of mother and daughters. Most of the sewing is durable but not skilled. No one in the town [511] knows how to fit a garment, and as standards [177] approach those of the Mestizos, more and more people buy ready-made garments from outside [439] in stores, markets, or in Mestizo towns.

Most of the "tailors" are specialists, making only one type of garment. One woman makes only men's cotton trousers. She makes six pairs a day, double-stitched. Garments for weddings are single-stitched. The cloth is provided and cut by the customer. This woman works only intermittently on order. Trousers require about 2½ m. of cloth. Men's shirts require about the same amount of material but cost more for sewing. One woman makes only aprons, while another makes only children's garments.

291 177 *Men's dress.*—Influence of the Mestizo world is strongly evident in men's dress. Yet, aside from the priest, no resident of the town dresses completely *catrín* (i.e., in city style) in Cherán, and only rarely do individuals going to Uruapan or some other town wear city dress. Many men, it is true, commonly wear one or more garments of "town" style. Coats, sweaters, and jackets are owned by many. Tailored woolen trousers, on the other hand, are rare, while almost none own complete suits. Ordinarily, the cotton trousers of the Mestizo countryman rather than woolen trousers replace the white *calzones* of the Indian.

1:Beals E-5 (1940-1941)1946 NU34 Tarasco NU34
[p.72a]

Sierra Tarascans

Cost for 6-pound blanket:

| | |
|---|---|
| Wool, 9 pounds (varying with year and season) | $11.25 |

Labor:

| | Days |
|---|---|
| Purchase of wool | 1 |
| Cleaning and washing, actual labor (covering 2 or 3 days' time) | 1 |
| Carding | 2 |
| Spinning | 2 |
| Weaving | 2 |
| Total | 8 |

| | |
|---|---|
| Asking price | $25.00 |
| Average sales price | 20.00 |
| Gross profit | 8.75 |
| Return for labor per day | 1.09 plus |
| Return per day for total days spent on part-time basis | .58 plus |

*Comment:* Although involving only 8 days' actual labor, the work would be spread over about 15 days. Weavers usually would have to take 1 or 2 whole days off to get wood and some days or parts of days when the weather might be unpleasant. In addition, repairs to equipment and houses must be made, perhaps an animal must be looked after, and so on.

*Belt weaving:*

*Equipment:*

Loom, home-made

*Costs:*

| | |
|---|---|
| Materials, thread and yarn | ? |
| Labor, part time | 2 days |
| Asking price | $1.25 |
| Actual selling price | 1.00 |
| Gross profit, estimated | .80–.90 |
| Daily labor return (part time, probably 5–6 hours) | .40–.45 |

*Clothing manufacture:*

Capital investment:

| | |
|---|---|
| Sewing machine | $40.00–150.00 |

Expenses:

| | |
|---|---|
| Materials (for work on order) | None |
| Returns per day (from various workers' statements) | $0.75–$1.30 |

*Comment:* Most workers, especially men, are part-time operators; many work only on order, when daily income for elaborate garments may be much higher. Income figures are hence misleading, as they are based on steady work on low-priced garments.

Clothing made for exchange at weddings usually is only single-stitched; regular clothing is double-stitched. Prices for sewing men's cotton trousers vary from 10 to 15 centavos for single stitching and 15 or 25 centavos for double stitching. Men's shirts vary in cost from 25 to 40 centavos (or more for fancy rayon shirts). Women's aprons cost 12 centavos.

294 433 434 [435] Some persons make and sell finished garments. Men's trousers or blouses require about 2½ meters of material, at an average cost of about 30 centavos a meter. One woman specializes in children's garments. She claims to make 3 to 4 dozen children's garments a week, selling them at 80 centavos to $2.50 apiece (including materials). Her profits vary. A child's rayon dress requiring $1.50 worth of material she sold for $1.75, while for a cotton dress requiring $0.40 worth of material she charged $0.80.

[439] All fitted or tailored garments, which are growing in popularity, are imported. A widely heard comment was that anyone in Cherán who could make and fit garments, especially men's shirts, would make great profits.

## MINOR ACTIVITIES

433 434 [394] *Candlemaking:*

| | |
|---|---|
| Cost of wax (per kilo) | |
| Sales of candles from 1 kilo of wax | $2.25–$2.50 |
| Possible profit (excluding labor and equipment) | $0.50–$1.00 |

[283] *Rope making (horsehair):*

| | |
|---|---|
| Horsehair $0.50 per kilo | $0.37½ |
| Labor | 1 day |
| Sale price | $1.50 |
| Gross profit per day | $1.12½ |

*Comment:* Only one man was found who made ropes. No data were secured on agave fiber ropes made by the same man, nor on the time taken in marketing and securing raw materials. As all the equipment is homemade and very little capital is needed, the gross profit probably is close to net profit except for the factors mentioned.

295 433 434 *Shoemaking:*

Equipment:

| | |
|---|---|
| Sewing machine | $55.00 |
| Lasts | ? |
| Knives | ? |

Labor:

1 cheap pair of shoes per day is produced by a shoemaker and 2 unpaid apprentices

[435] Value of product (per pair) ..... $3.00–7.00

Estimated gross income:

| | |
|---|---|
| Per day | .50 |
| Per pair of shoes | 1.50–3.50 |

*Comment:* No clear picture of the economics of this industry was secured. The selection and purchase of hides involves knowledge of tanning, size, and quality of the hide. Guarache makers apparently earn as little as 20 centavos a day, but there are no full-time professionals in town. All local manufacturers make guaraches to order and in claiming they make only one pair a day, they probably mean they do not attempt to make more than one pair a day.

281 435 434 *Tanning:*

| | |
|---|---|
| Charge per cowhide | $5.00–$10.00 |
| Charge per sheepskin | .50 |
| Average daily return | 1.25 |

438 178 [166] An interesting aspect of cottage industries is their ephemeral character. Owing to movement of artisan families from one pueblo to another and changes in markets and fashions, certain crafts disappear in some towns and reappear in others. In the last 160 years 37 Tarascan villages and *ranchos* have lost old crafts or gained new ones; 27 have retained their characteristic trades (table 2).[184] The pottery industry in Santa Fé [323] de la Laguna dates only from the last quarter of the 19th century, and in 1910 hat making was [294] brought into Jarácuaro by a few political refugees from Pichátaro. A large number of Tarascan [282] towns were famed for leathercrafts (saddles and shoes) during the 18th and 19th centuries, but now, owing to changes in transportation and the rise of factory production, local leather products have almost disappeared. Again, the iron craft [325] of San Felipe de los Herreros has practically vanished, for factory-made articles can be obtained more cheaply from surrounding mestizo towns.

---

[184] Insufficient data were at hand to determine possible changes in home industries for 20 towns and ranches.

286 ducers. In many towns only three of four *obrajeros* operate full time and produce mainly for local consumption. Raw wool is purchased locally, is washed, carded, dried, and spun by the *obrajero*. In addition to manufacturing blankets,
[438] some weavers in Nahuatzen, Charapan, and Tanaco make woolen cloth for the traditional black skirt, which is still worn by most Tarascan women. Such skirts, however, are being made increasingly from factory-woven woolens purchased in mestizo towns.

531 **Embroidery and sewing.**—In the Sierra villages
438 of San Lorenzo, Tarecuato, Angahuan, Ahuíran, Cuanajo, Nahuatzen, and Charapan some women specialize in cross-stitching and embroidering designs on blouses (*huipiles*), napkins, and tablecloths. Many of these articles are for tourist trade in Uruapan, Zamora, and Pátzcuaro.
286 During the colonial period and the first half of the 19th century, the men and women of Ahuíran and Pomacuarán knitted men's stockings of cotton thread, using otate needles (AGN Historia, vol. 73, f. 344; Martínez de Lejarza, 1824, pp. 179–180).
[439] Ahuíran stockings were sold to mestizos and Spaniards over a wide area, but this trade declined after the change in styles of men's clothing in the early 1800's.

294 **Hat making.**—Among the Tarascans this indus-
[177] try was introduced probably in early colonial days.[145] However, the first mention of the industry comes from the report of 1789, which cites it in Nurío (AGN Historia, vol. 73, f. 348). There, hats were made of wool, likely by a felting process, but the industry had disappeared by the end of the last century. None of the colonial sources mentions the manufacture of straw hats in Tarascan towns. Old men from Pichátaro remember hat making during their childhood, which fact at least dates the industry in the last half of the 19th century. (Palm-leaf hats were made in Morelia at the end of the colonial period, according to Martínez de Lejarza, 1824, p. 29.)
294 Today hats (principally of palm leaf, some of
438 wheat straw) are made in seven Tarascan towns, Jarácuaro Island being the main center.[146] Palm leaf brought up from the *tierra calients* is cut in thin sections, which are braided into strips, called

[145] According to tradition, hat making was one of the many industries which Don Vasco de Quiroga taught the natives. (Leon, 1904, p. 62.)

[146] At least one member (and often three or four) of every family on Jarácuaro Island makes hats. Having little tillable land, this pueblo is one of the most specialized home-industry towns in the Tarascan area.

4: West K-5 (1946) 1948 NU34 Tarasco NU34
[P.66-a] Pátzcuaro

294 438 *trensas*. In practically every Tarascan pueblo women, children, and sometimes men weave *trensas* in their spare time, while walking to and from market, and while herding sheep. Braids are sold in the main markets, where they are purchased by hat makers. Little wheat straw is now braided, palm leaf being more durable and more easily handled.[147] After they are pressed and straightened with wooden rollers (fashioned like a clothes wringer), the braids are sewed together in spiral form, beginning at the crown. The brim and crown are made separately and sewed together. In Jarácuaro wooden forms are used to block crowns. Most hatters employ a Singer sewing machine, but those of Urapicho, Pamatácuaro, and Zacán sew by hand. In some towns hat making is disappearing, owing largely to factory competition. Pichátaro, formerly an important hat town, now has but four hatters. In 1936 the industry disappeared completely in Tiríndaro.

285 438 **Tule weaving.**—The indigenous sleeping mat or *petate* (k'uírakua) is found in most of highland Mexico. Also, the fire fan or *soplador* (p'unítarákua), an indispensable kitchen utensil, is woven of tule. Mats and fire fans are made wherever tule is available—along the shores of shallow lakes, marshy areas, and river banks. Consequently, the villagers living around Lake Pátzcuaro are the chief tule weavers in the present Tarascan area (map 20; pl. 12). In San Andrés 90 percent of the working population make *petates*. Even a few families in the Sierra towns of Pichátaro and Cherán fabricate mats from tule reeds imported from Erongarícuaro. Formerly the towns near the northern march[A] districts were important *petate* producers, but there the industry has greatly declined with the desiccation of wet areas and disappearance of the tule brakes.[148] Tule is likewise being depleted along the shores of Lake Pátzcuaro. The *petateros* of Puácuaro, Napízaro, and Uricho import reeds from Jarácuaro Island, the local supply having been exhausted years ago.

Tule reeds are cut with the sickle, semidried, and bundled for transport or storage (pl. 8). In

[147] Hats of wheat straw are now made only in Pamatácuaro, Teremendo, and Apo (mestizo).

[148] A few *petates* are still made in Tarascan Tarejero, on the border of the former Zacapu marshes; in mestizo Ettícuaro (Tangancícuaro Basin); and in Tzintzuntzan (near the Cotija graben lakes). Moreover, the industry is still carried on in some of the Lerma Delta towns east of Lake Chapala, and in a few villages around Lake Cuitzeo.

[A] [probably should read 'marsh'.—Analyst]

285 438 the Lake area a twilled technique is used in mat making, which is performed on the ground, the only tools being a knife or sharp stone to cut tule stalks and a wooden mallet to flatten the reeds as they are twilled. Several sizes of mats are made; the largest, called simply k'uírakua-k'éri, measures 1.5 by 1 m.[149] Both mats and fire fans are taken to the Lake markets (Pátzcuaro, Erongarícuaro, Quiroga), where they are purchased by the Sierra people and buyers from the *tierra caliente*.

**Basketry.**—Ihuatzio and San Jerónimo in the Lake area are the only modern Tarascan towns in which baskets are made. The former Tarascan towns of Tangamandapio (west of Zamora) and Panindícuaro (north of Zacapu) are the main basket centers in the general area, supplying the Sierra people with the šúndiča, or harvest baskets for maize. The Ihuatzio baskets are made of split carrizo stalks, which grow in abundance in local house lots. Both wicker and twilling techniques are used (pl. 12).

286 438 **Netting.**—In all fishing villages around Lake Pátzcuaro nets are made by men, women, and children in their spare time. On Janitzio and the Urandén Islands a few professional *rederos* fabricate nets to sell to fishers in other pueblos. Cotton [283] thread purchased in Pátzcuaro is wound on the *hilador* (šoróranskua) and five to six strands are twisted with the native malacate or with the European spinning wheel. The twisted strands are water-soaked and sun-dried. Nets are made with the čurúkua, a large wooden needle (20 cm. long, 2 cm. wide).

● 294 [171] **Capote making.**—In many parts of indigenous Mexico the palm-leaf raincape (*capote*), similar to those worn in the Orient, is a common outdoor apparel during the wet season. *Capotes* are made [438] by women in three Tarascan towns—Quinceo, Arantepacua, and Turicuaro—using leaves of the *palma pimu* (*Acoelorraphe pimo*), which are im- [439] ported from the *tierra caliente* below Ario de Rosales.[150] The capes are fabricated by tying soaked strips of palm leaf onto braided cords, two of which are stretched parallel and one foot apart on pegs driven into the ground. The strips of

[TEXT CONTINUES TOP OF P. 670]

[149] Other types: The k'umérita (1.3 m.×80 cm.) and the šimánitapémiela (1 m.×80 cm.), both used for sleeping; the jatápetakua, a small knee mat; téstitan, a long, narrow mat sold to mestizos as a sort of rug. Many more sizes and varieties occur, the names and types varying from place to place. The terms and types given above were observed in Ihuatzio and some of the rancherías along the shore of the Tzintzuntzan Peninsula.

[150] Most of the palm leaves used in Arantepacua are said to come from the localities of Rosario, La Playa, Charapendo, and San Marcos, south of Ario.

4: West K-5 (1946) 1948 NU34 Tarasco NU34
[P. 679]

palm are tied on one cord, half-hitched to the second one, and then tied back to the first; the loose end of the strip is permitted to hang over the second cord, thus forming a drainage surface similar to thatch (pl. 12). The process is repeated, adding a new row of tied strips to the previous one until the garment (4 ft. long and 3 ft. wide) is completed. Arantepacua *capotes* are marketed as far north as Guanajuato. No mention is made of these raincapes in the colonial sources, nor is there a Tarascan word for the garment. It is not improbable that the *capote* is an introduced trait.

**Broommaking.**—This is another minor industry now practiced by a few men in Arantepacua. Pimu palm leaves are symmetrically arranged around the end of a finished pine stick and then tied with agave fiber or a braided strip of palm. The result is a common broom found in all parts of central Mexico.

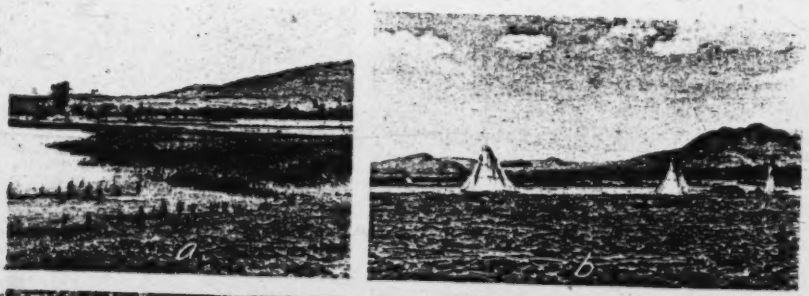
## WOODCRAFT

According to the early Spanish chroniclers, the Tarascans were clever craftsmen in wood, and under the instruction of Spanish masters the natives became among the best carpenters in New Spain (La Rea, 1945, p. 20; Escobar, 1924, p. 147). By 1580 Indian carpenters in at least four towns—Pátzcuaro, Necotlán (Undameo), Tiripitío, and Tingüindín—were turning out European-styled tables, chairs, and writing desks, which found ready sale among Spanish colonists in all parts of Michoacán.[180a] At that time lathework was established in Pátzcuaro, and probably before 1540 Tarascans had begun to carve saddle frames for Spanish horsemen (Molotinía, 1903, p. 183). Like other Tarascan industries, woodwork was probably a rudimentary pre-Conquest craft greatly modified and improved by European techniques. However, the present commercial types of Tarascan woodwork—cabinet work, lathe work, and adz work—all appear to have been developed in the 16th century.

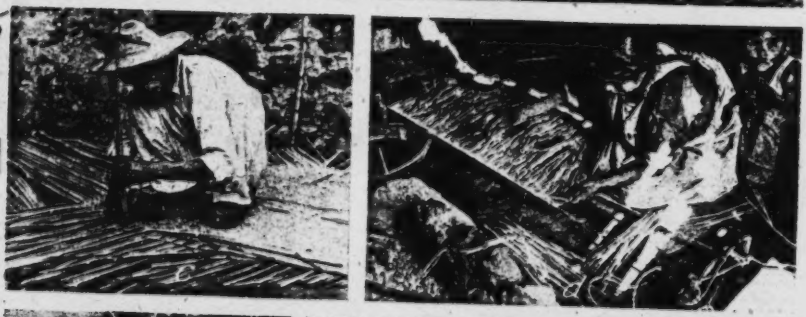
Specialized woodwork (apart from lumbering and shake making) was formerly more widespread among Tarascans than at present. At the end of the 18th century wood objects were manufactured in 21 pueblos (AGN Historia, vol. 73), today in only 13 towns. In but eight of the latter is the

[180a] Rel. de Pátzcuaro, 1581 (Martínez, 1889, p. 47); Mus. Nac., leg. 102: Rel. de Chocandirán, Rel. de Necotlán; Rel. de Tiripitío, ms. (in Garcia Library, Univ. of Texas).

249
133




285
291
516
[294]




[531]
[415]

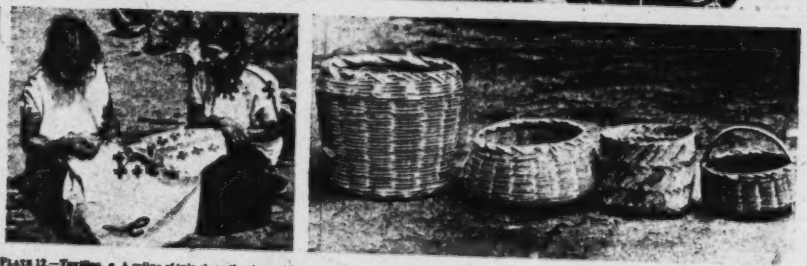


PLATE 12.—Textiles. a, A milpa of tule along the shore of Lake Pátzcuaro, between San Jerónimo and San Andrés. Many potato makers own their own milpas, but sometimes portions of the brakes are leased to tule cutters, who harvest the reeds and distribute them to various villages around the lake. b, Harvesting tule, Jarácuaro Island, Lake Pátzcuaro. After partially drying in the sun, the reeds are bundled into sheaves and stacked in shocks. c, Weaving petates, Ihuatzio. Note the wooden mallet on the mat near the man's hands. d, Making esparto, Aranjuenco. Work is done inside the kioken. Note the hearth, lower left. Palm leaves are kept moist by dipping them in the holes of water at left. e, Embroidering a huipil, or blouse, Tzurumútaro. f, Basketry woven at Ihuatzio. The large one (left), called *butáca*, is used to carry bread and fruit. It is usually transported on the back in the *ayate*. The flat round basket in the right (simply named "canasta") is for carrying eggs, pitaxahia, and often fish. The handled basket at called *d'Akúcu* and is used to carry fish and tamales. The twilled basket in a thumil (the Tzurumútaro call it "*nacúa*") for tortillas.

[End-plate 12]